

CLAIMS

What is claimed is:

1. A system for storing orthopedic graft material, comprising:
a container defining a first cavity capable of receiving a liquid;
and
a syringe having a body which is configured to be a vacuum reservoir and to hold orthopedic material, said syringe being disposed within the first cavity.
2. The system according to claim 1, wherein the container defines a second cavity configured to receive the liquid and a coupling portion defined between the first and second cavities.
3. The system of claim 2, further comprising a clamp between the first and second cavities.
4. The system according to claim 1, wherein the syringe is at least partially disposed within the fluid couple.
5. The system of claim 4, wherein an interface between said syringe and said fluid couple is substantially sealed and wherein said tubular body defines a fluid passage between said first and second cavities.

6. The system according to claim 1, wherein the syringe includes a plunger.

7. The system according to claim 6, wherein the plunger defines at least one through passage.

8. The system of claim 6, further comprising a gas permeable membrane between said plunger and the orthopedic material.

9. The system according to claim 1, wherein the second cavity comprises reconstitution liquid.

10. The system according to claim 9, further comprising a reconstitution liquid selected from the group of water, saline, biologically active materials, platelets, antibiotics, and combinations thereof.

11. The system according to claim 8, wherein the gas permeable membrane allows the passage of gaseous fluids but restricts the flow of fluids therethrough.

12. The system according to claim 1, wherein the orthopedic material is selected from the group of allograft, xenograft, or combinations thereof.

13. A container for the storing and reconstitution of orthopedic implant materials with a liquid comprising:

a dividing device to divide the container into first and second cavities, the first cavity containing the liquid and the second cavity comprising a syringe holding the orthopedic material under a vacuum, said syringe further defining a vacuum reservoir fluidly coupled to the second cavity.

14. The container according to claim 13, wherein the syringe comprises a body which is fluidly disposed between and fluidly couples the first and second cavities.

15. The container according to claim 14, wherein the body defines a vacuum storage device.

16. The container according to claim 13, further comprising a gas permeable membrane disposed within the syringe.

17. The container according to claim 13, wherein the syringe comprises a plunger which defines a plurality of through passages.

18. The container according to claim 13, wherein the container defines a seal around an outer surface of the syringe.

19. The container according to claim 13, further comprising an injection port fluidly coupled to the first cavity to receive the liquid.

20. A method for hydrating an orthopedic graft material, comprising:
providing a container which defines a first and second cavity;
disposing a member which holds the orthopedic graft material between the first and second cavity;
applying a vacuum to the second cavity;
filling the first cavity with a liquid; and
fluidly coupling the liquid from the first cavity to the member, whereupon the liquid migrates into the member to infuse into the orthopedic graft material component so as to form a hydrated orthopedic graft material.

21. The method according to claim 20, further comprising providing a dividing device for fluidly separating the second cavity from the member.

22. The method according to claim 20, further comprising a gas permeable membrane disposed between the second cavity and the member.

23. The method according to claim 20, wherein the member is a syringe having a plunger which defines plurality of through bores.

24. A system for storing orthopedic graft material, comprising:
a first container configured to hold reconstitution liquid; and
a second container disposed within the first container, said second container being configured to hold and dispense the orthopedic material, and defining a vacuum reservoir.

25. The system according to claim 24, wherein the second container is a syringe.

26. The system according to claim 24, wherein the first container defines first and second cavities.

27. The system according to claim 26, further comprising a clamp which fluidly separates the first and second cavities and wherein the second container is disposed within the first cavity.

28. The system according to claim 27, wherein the second container fluidly couples the first and second cavities.

29. The system according to claim 27, wherein the second cavity is configured to hold the liquid.

30. The system according to claim 26, wherein the second container comprises a perforated plunger.